FIG. 1A

```
   NcoI         10         20         30          KT1 36MER (SEQ
ID NO: 1)
GAGCCATGGGCCTCCTCCACGAGTTCGGCCTTCTGG
     *** ||||||||||||||||||||||||||||
      m  g  L  L  H  E  F  G  L  L  E ... <-- upper case are
WT aa
  278   280   282   284   286   288  <-- codon numbering for
WT aa
AGTTTGGCAGCCTCCTCCACGAGTTCGGCCTTCTGG . . .    (SEQ ID NO: 14)
       959        969        979          TaqPol.seq GenBank
entry
Accession No. J04639 (numbering includes 5' non-translated
region)
```

FIG. 1B

```
--other strand-- KLENTAQ32 35mer   (SEQ ID NO: 3)
                          HindIII
         26         16  ****** 6
GGACTGGCTCTCCGCCAAGGAGTAGTAAGCTTCGC
|||||||||||||||||||||||   ||
  D  W  L  S  A  K  E  *
 826   828   830   832
GGACTGGCTCTCCGCCAAGGAGTGATACCACC   (SEQ ID NO: 15)
      2604       2614       2624
TaqPol.seq
```

FIG. 2

```
        10        20         30
GAGCCATGGGCCTCCTCCACGAGTTCGGCCTTCTGG   KT1 36MER  (SEQ ID NO:
1)
     *** |||||||||||||||||||||| ||||
      m  g  L  L  H  E  F  G  L  L  E ...   <-- upper case are
WT aa
     278   280   282   284   286   288 <-- codon numbering for
WT aa
AGTTTGGAAGCCTCCTCCACGAGTTCGGCCTCCTGG   Tfl.seq(SEQ ID NO: 16)
GenBank
      1387     1397     1407         entry Accession number
X66105
                         (numbering includes 5' non-translated
region)

        26        16          6        --other strand--
GGACTGGCTCTCCGCCAAGGAGTAGTAAGCTTCGC     KLENTAQ32 35mer
|||||||||||||||||||||||||   | | |
  D  W  L  S  A  K  E  *
    826   828   830
GGACTGGCTCTCCGCCAAGGAGTAGGGGGGTCCTG     Tfl.seq  (SEQ ID NO:
17)
      3032      3042      3052
```

FIG. 3

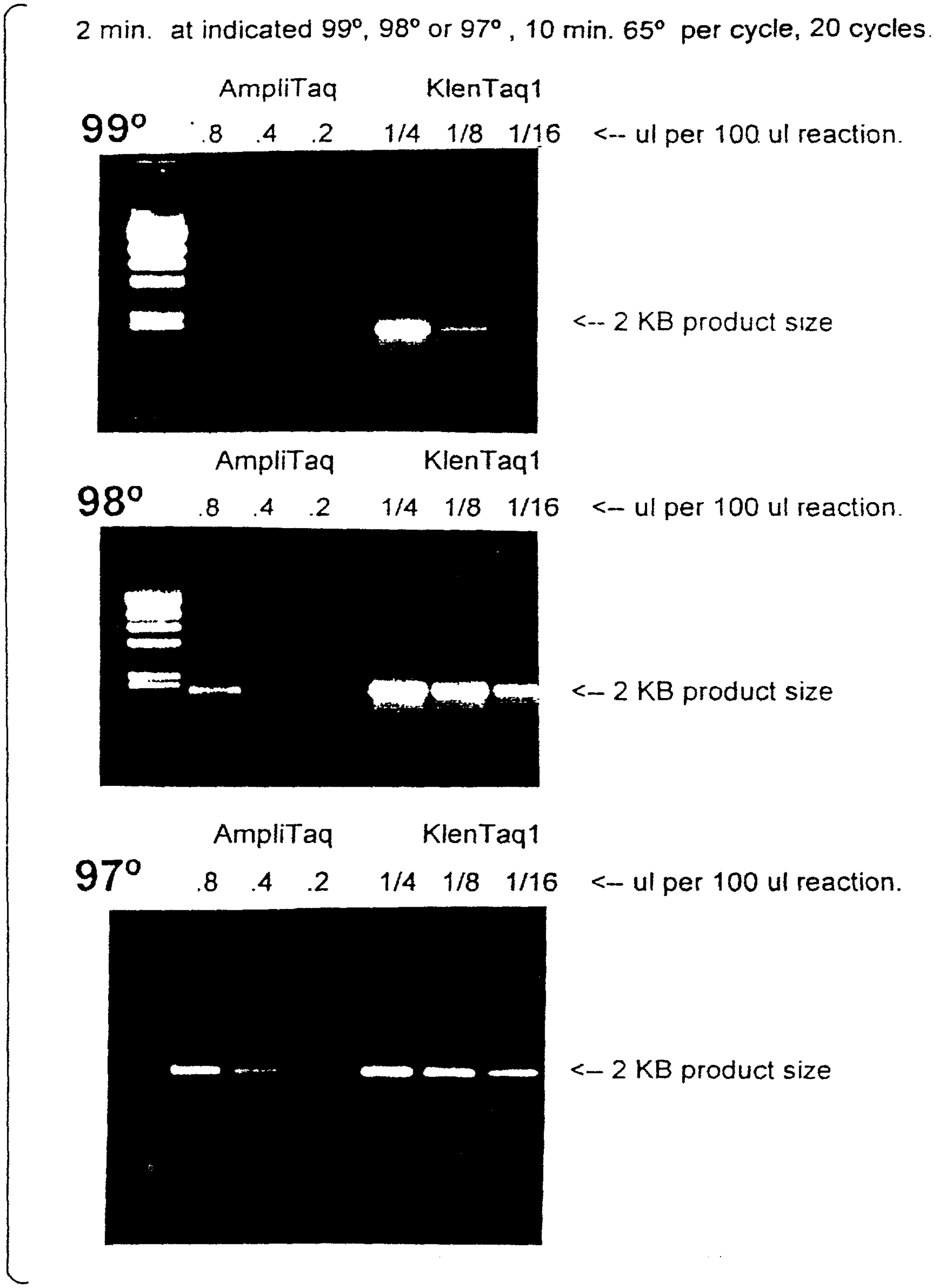
2 min. at indicated 99°, 98° or 97°, 10 min. 65° per cycle, 20 cycles.
AmpliTaq
KlenTaq1
99°
.8
.4
.2
1/4
1/8
1/16
<-- ul per 100 ul reaction.
<-- 2 KB product size
AmpliTaq
KlenTaq1
98°
.8
.4
.2
1/4
1/8
1/16
<-- ul per 100 ul reaction.
<-- 2 KB product size
AmpliTaq
KlenTaq1
97°
.8
.4
.2
1/4
1/8
1/16
<-- ul per 100 ul reaction.
<-- 2 KB product size

FIG. 4

Top, figure 4A: 2 min. 98° C, 10 min. 65° C, 20 cycles
Bottom, figure 4B: 2 min. 95° C, 10 min. 65° C, 20 cycles

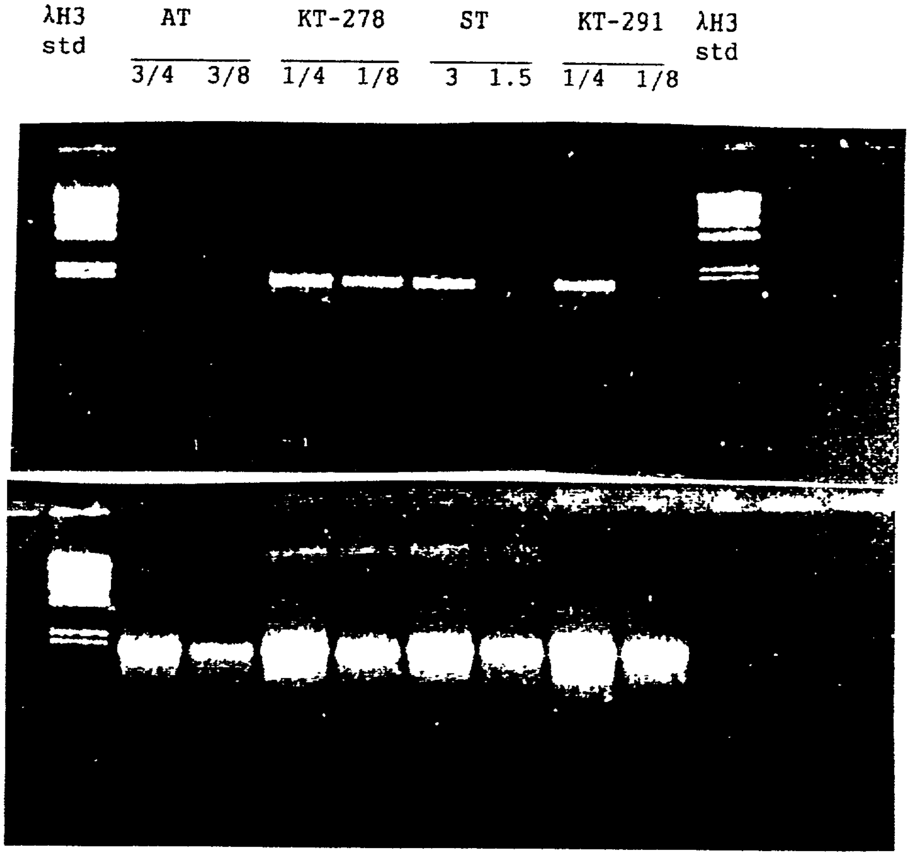

FIG. 5

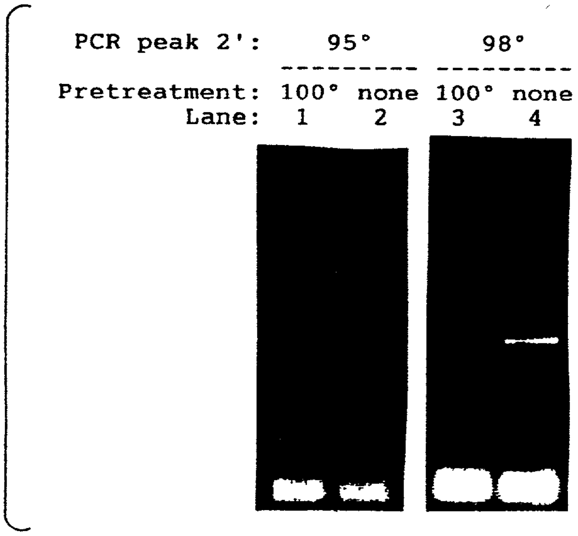

FIG. 6A

20 cycles of 2 min. 94°, 2 min. 60°, 7 min. 72°

ul of KlenTaq-278	1	1	1	1	0	2	2	2	2	0	λH3
ul of Pfu DNA Pol	1/2	1/4	1/8	0	1/2	1/2	1/4	1/8	0	1	

6.6 KB -->

New Art | Prior Art | New Art | Prior Art

FIG.6B

20 cycles of 2 min. 94°, 2 min. 60°, 10 min. 72°

ul of KlenTaq-278	1	1	1	1	1	1	0
ul of Pfu DNA Pol	1/2	1/4	1/8	1/16	1/32	0	1/2

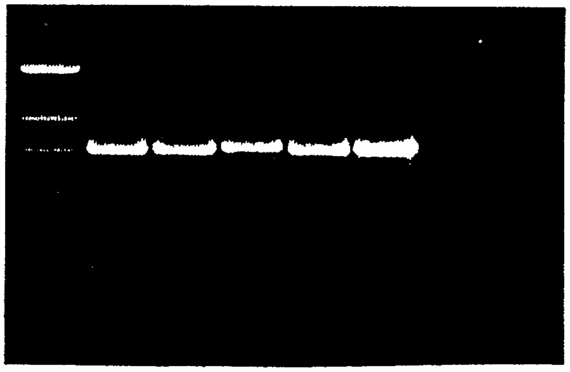

FIG.6C

20 cycles of 2 min. 95°, 1 min. 60°, 30 min. 72°

ul of KlenTaq-278	1	1	1	1	1
ul of Pfu DNA Pol	1	1/4	1/16	1/64	0

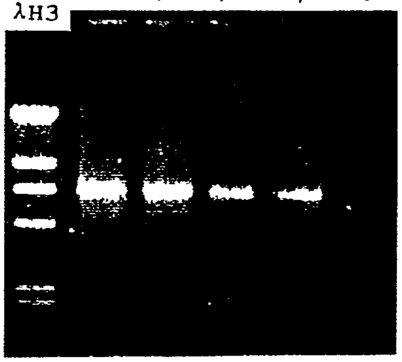

FIG.7

Channel:	1	2	3	4	5	6	7	8
Template DNA:	λplac5	λpcytT	λpcytT	λplac5	λplac5	λK138	λK138	λK138
ng of template:	1	1	10	1	10	1	10	10
primer 1 SEQ ID NO:	9	7	7	10	10	7	7	9
primer 2 SEQ ID NO:	8	8	8	8	8	8	8	8
Size of PCR product Expected, in kb:	8.4	12.5	12.5	15	15	18	18	19.7